

## DOCUMENT RESUME

ED 400 323

TM 025 727

AUTHOR Klecker, Beverly; Loadman, William E.  
TITLE Using a Metaphor To Increase Survey Return Rates.  
PUB DATE 4 Nov 95  
NOTE 17p.; Paper presented at the Incorporated Annual Meeting of the American Evaluation Association (Vancouver, British Columbia, Canada, November 4, 1995).  
PUB TYPE Reports - Research/Technical (143) -- Speeches/Conference Papers (150)  
EDRS PRICE MF01/PC01 Plus Postage.  
DESCRIPTORS \*Educational Change; Elementary Secondary Education; \*Incentives; \*Metaphors; Principals; Program Descriptions; Program Evaluation; Questionnaires; Research Design; \*Response Rates (Questionnaires); School Restructuring; Surveys; Teacher Empowerment; Teachers  
IDENTIFIERS Reform Efforts

## ABSTRACT

The 307 schools funded by the Ohio Venture Capital program were the focus of a study on teacher empowerment. This paper focuses on the method used to maximize survey responses, rather than on the study findings. Data were sought from the building principals and 10,544 classroom teachers to create a "total picture" of the individual school at a particular "point in time" in the school restructuring process. The metaphor, "a snapshot in time," was used to collect the data. A limited edition print of a painting of an early Ohio school was used as an incentive for schools that returned a total picture. An original painting for the teachers' lounge was promised to the school with the highest return rate. The return rate was calculated for each school as responses were received, and statistical techniques were used to determine the representativeness of the sample schools and responding teachers. Initial responses that met the "snapshot" criteria were received from 104 schools, of which 56 had 100% participation. The overall building return rate was 59.6% and the teacher return rate was 38.8%. The metaphor created an eye-catching and memorable survey that was apparently well received by respondents. An appendix presents the survey cover letter. (Contains 1 table and 17 references.) (SLD)

\*\*\*\*\*  
\* Reproductions supplied by EDRS are the best that can be made \*  
\* from the original document. \*  
\*\*\*\*\*

ED 400 323

U.S. DEPARTMENT OF EDUCATION  
Office of Educational Research and Improvement  
EDUCATIONAL RESOURCES INFORMATION  
CENTER (ERIC)

☒ This document has been reproduced as  
received from the person or organization  
originating it.

☐ Minor changes have been made to  
improve reproduction quality.

• Points of view or opinions stated in this  
document do not necessarily represent  
official OERI position or policy.

PERMISSION TO REPRODUCE AND  
DISSEMINATE THIS MATERIAL  
HAS BEEN GRANTED BY

*BEVERLY KLECKER*

TO THE EDUCATIONAL RESOURCES  
INFORMATION CENTER (ERIC)

## Using a Metaphor to Increase Survey Return Rates

Beverly Klecker  
William E. Loadman

The Ohio State University

Presented at Evaluation '95 Conference

Vancouver, Canada

November 4, 1995

BEST COPY AVAILABLE

Tm 025727

## Introduction

This paper presents the background for the Venture Capital Schools in the state of Ohio and the questions that drove a study of teacher empowerment within these restructuring schools. The questions of the study presented an unique problem for data collection, that is, data were sought from a census of the teachers and the building principal within each school. The contact person for each school was the Venture Capital Coordinator. The coordinator was in some cases, but by no means all, the building principal of the school. As a "total picture" of the individual school was sought, focused, as is all survey research, at a "point in time" the metaphor "a snapshot in time" was used to collect the data. A signed and numbered limited edition print of a "primitive" painting of an early Ohio school was used as an incentive for schools returning a "total picture." Additionally, an original painting of the school for the school's teachers' lounge was promised for the school with the highest return rate. Results of the study were also assured for the participants. The data collection process is detailed, the resulting return rates, data analysis, results, and a discussion of the method are presented.

### Background of the Study

The focus of school reform since 1986 has been on restructuring at the school level (Holmes Group, 1986, 1990; Levine, 1988; Goodlad, 1990; Elmore, 1990;

Sarason, 1992; Sizer, 1992; Comer, 1988). Educators and legislatures have moved from identifying discrete variables to be applied as remedies by school personnel to developing environments in which schools can identify their unique impediments to student achievement and develop individual programs. Timar & Kirp (1989, p. 511) stated, "If states are serious about improving the quality of education and striving for excellence they must create a context in which organizational competence at the school level can develop." In the state of Ohio, this context was created through funding from the state legislature. Venture Capital Grants were made available to support school improvement; the Venture Capital Grants have served as catalysts for local schools to redesign their individual structures. These grants of \$25,000 per year per school are renewable for a five-year period to support individual schools. Criteria for evaluating restructuring proposals by individual schools were delineated by the Ohio Department of Education (July, 1993):

1. Evidence of community readiness and willingness to develop and implement new school improvement ideas and to anticipate change and reshape thinking and behavior.
2. School improvement strategies collaboratively designed by the community and integrated into the school's structure demonstrating that all children can learn.
3. Planned changes that are systematic and wide-ranging.
4. Evidence that community agencies and groups are thoughtfully and purposively involved.
5. School improvement strategies that focus on learning.
6. Evidence that teachers are given expanded roles in planning and implementing change.

7. Policies and practices that contribute to the success of all students.
8. School improvement plans that leverage existing dollars and resources and identify new monies and resources for the support and improvement efforts (p. 10).

Using these criteria, 307 Venture Capital Schools were funded by the state of Ohio in Rounds I, Fall of 1993, and Round II, Spring of 1994 (The Venture Capital Assessment Team, October, 1994). These schools were the focus of a study on teacher empowerment in the Spring of 1995, designed to explore criterion 6 at the initial stages of school restructuring.

#### Methodology

The questions that guided the inquiry for the study were:

1. What are the demographic characteristics, educational and professional backgrounds of teachers participating in the restructuring Venture Capital School projects with regard to the following variables: gender, age, race, academic degrees, years of teaching experience in K-12 schools, years of teaching experience in current position and teaching level (i.e., elementary, middle school, secondary)?
2. What is the relationship between the demographic characteristics and teacher empowerment?
3. What is the relationship between the restructuring model chosen by the school and teacher empowerment?
4. What is the relationship between the openness to change of the building administrator and teacher empowerment?
5. What is the relationship between teacher empowerment and teacher job satisfaction?
6. Which of the above variables (i.e., demographic characteristics, restructuring model, administrator's openness to change, and job satisfaction) can be used to predict teachers' perception of empowerment?

### Population of the Study

The population for the study was the 307 building principals and 10,544 classroom teachers working within the 307 Venture Capital Schools funded in the state of Ohio in rounds I and II of funding. The study was originally designed to use a random stratified cluster (schools) sample with the data stratified on restructuring model (c.f. Question 3 of the study). It was recognized that more than one-half of the schools would be required to draw a proportionate sample, therefore, a census sample was chosen. The sample consisted of the total population of classroom teachers and building principals within 307 Venture Capital Schools.

### Instruments

Three instruments were used to collect data for the study. Teacher empowerment was measured by the School Participant Empowerment Scale (Short & Rinehart, 1992); the principal's openness to change was measured by the Inventory of Change in Organizational Culture (Dunham, Grube, Gardner, Cummings, and Pierce, 1989, revised by Huang, 1993); teacher's job satisfaction was measured by the National Follow-up Survey of Teacher Education Graduates Job Satisfaction Subscale (Freeman, Loadman, and Kennedy, 1991). Demographic data were collected with a self-report questionnaire.

### Data Collection

Data collection began with the design of a cover letter to explain the study. Since the study, like all survey research, was limited to a "snapshot in time" this metaphor was used to create the cover letter (Appendix A). The cover letter asked

each Venture Capital contact person to use the classroom teachers' and principal's instruments enclosed as a "camera" to take a picture of his or her restructuring school. It requested that at least 80% of the classroom teachers as well as the building principal be included in the picture. A limited edition copy of the color reproduction of a "primitive style" painting of an early Ohio school was offered to each school responding with at least 80% of the teachers surveyed and the building principal. An original 16 x 20 acrylic painting of the school with the highest return rate was promised. Results of the study were assured to the participants.

The Ohio Educational Directory (Ohio Department of Education, 1994-95) was used to identify the number of classroom teachers for each school. A packet, including the cover letter to the Venture Capital contact person, the Inventory of Change in Organizational Culture instrument for the building principal, and a School Participant Empowerment Scale for each teacher, sent to each Venture Capital contact person. Demographic information was requested with the principals' and teachers' instruments. Each instrument had an envelope attached requesting the individual respondent to complete the survey, enclose and seal it in the envelope, identify it with their initials only and return it to the Venture Capital contact person. (This minimal identification was necessary to aid the Venture Capital contact in completing data collection within the school). The packets were sent by priority mail with a self-addressed return priority mail envelope enclosed. The 307 packets containing a total of 10,554 classroom teacher survey instruments and 307 principal instruments were mailed February 14, 1995.

Follow-up phone calls were initiated February 22, 1995, to explain the study and to answer any questions that the Venture Capital contact person might have. A total of twelve phone calls were made. From these phone calls the researcher learned that the mailing for the evaluation by the state of Ohio for the Venture Capital Schools had been received on the same day as our survey. As the request for information by the state evaluators was extensive and was required the respondents to our phone calls stated that our request would either, "Go on the back burner," or "simply couldn't be completed." It was decided that any further follow-up phone calls would prove to be counter-productive.

Returns were received from February 25 to March 22. Five schools responded after the March 22 date. The first week of June, 1995, thank-you letters were sent to all Venture Capital contact persons within each school. The 8 x 10 limited edition print was sent to 104 schools. The identification numbers of the schools with 100% response rates (N=56) were placed in a hat and one school was chosen for the promised original painting. The principal of that school was contacted by phone before the thank-you letters were mailed June 4.

#### Data Analysis

As the returns were received, the return-rate for each school was hand calculated and recorded. The data were coded by school ID number, level, restructuring model, round of funding, and region of the state. The data were hand-entered into an IBM mainframe computer by the researcher. Separate data files were created for teacher data by return-rate, that is, teachers from schools with 100% return

rates were in File 1, 90-99% in File 2 and so forth. Principal data were maintained in a separate file. After the data were entered, individual ID numbers were added to the teacher data. Chi-square tests of goodness of fit statistics were hand-calculated to test the representativeness of the sample schools and the buildings within which the responding principals worked to the Venture Capital School population by level, restructuring model, round of funding, and region of the state. Chi-square tests of goodness of fit were used to test the representativeness of the responding teachers and principals to state demographics by gender. Independent Ttests and two-way ANOVAs were used to test similarity of item-responses on the School Participant Empowerment Scale of the teachers within each return-rate group with the responses of teachers within the 100% return-rate group.

### Results

Table 1 describes the return rate percentages within schools.

Table 1. Return Rates of Teachers and Principals within Venture Capital Schools

| Return Rate of Teachers within Schools | Number of Schools | Return Rate of Principals | Number of Principals |
|----------------------------------------|-------------------|---------------------------|----------------------|
| 100%                                   | 56*               | 100%                      | 56*                  |
| 90-99%                                 | 15*               | 90-99%                    | 15*                  |
| 80-89%                                 | 33*               | 80-89%                    | 33*                  |
| 70-79%                                 | 20                | 70-79%                    | 16                   |
| 60-69%                                 | 11                | 60-69%                    | 9                    |
| 50-59%                                 | 16                | 50-59%                    | 13                   |
| 40-49%                                 | 12                | 40-49%                    | 13                   |
| 30-39%                                 | 11                | 30-39%                    | 7                    |
| 29% and fewer                          | 9                 | 29% and fewer             | 6                    |
| Total                                  | 183               |                           | 168                  |

\*Note: Return rate requested in the cover letter

One hundred and four Venture Capital schools responded to the survey with the "snapshot" requested in the cover letter, that is, at least 80% of the teachers plus the building principal (Table 1). Fifty-six of this group responded with 100% participation from their building. The overall building return rate was 59.6%; the return rate for principals was 54.7%. Questionnaires were returned by 4,091 teachers for a return rate of 38.8%. The number of teachers within buildings ranged from 2 to 96. Clearly, more of the small schools responded to the survey.

Independent Ttests by item were performed comparing each of the eight return-rate groups with the group of 56 schools with a 100% return rate. Differences of one or two items were consistent over return rate groups with the exception of the 80-89%

return-rate group (compared with the 100% return-rate group). A difference of 9 items (of 38) was found. When further analyses of the items were performed significant gender differences were found. Subsequently, two-way ANOVAs by gender by return rate by item were performed after collapsing the groups into five groups (i.e., 100%, 99%-80%, 79%-60%, 59%-40%, 39% and fewer). Each group was compared with the 100% return-rate group. These analyses found two or fewer item differences by return rate group. Schools with 4 or fewer teachers were dropped from the study as the teachers' responses could not be confirmed as representative of the school. Three schools (with three principals) were dropped using this criterion. The data for the study included 180 schools, 4,084 teachers, and 165 principals.

Chi-square goodness of fit tests were used to compare the sample with the 307 Venture Schools in the population by level (i.e., elementary, middle school/jr. high school, high school, and "other" schools); by restructuring model used by the school (10); by round of funding (2); and by geographical region of the state (8). The sample was representative of the population on all four variables. (The category of "other" schools, including vocational and magnet schools, was subsequently dropped from the data analysis as the N was comparatively small). The buildings in which the principals worked were representative of the population by the same four variables. The teachers were representative of the teachers in the state by gender; the principals were not representative of principals in the state by gender, the sample of principals had more female principals that would have been expected from the state data. Principal gender data from the 307 Venture Capital Schools were not available.

## Discussion

This presentation of a data collection method was not a controlled scientific study, that is, the effect of using a "reward" to increase return rates was not the purpose of the study. Rather, this is presented as an idea for data collection that may be adapted by other researchers. A color photograph could easily be substituted for the painting. The use of the metaphor of a "snapshot in time" and "total picture" had the following positive elements:

1. The cover letter to the Venture Capital contact person was eye-catching and unique.
2. The "total picture" included all of the classroom teachers and the building principal within each school--the Venture Capital grants required total school participation. Each participant's importance was, thus, reinforced by the data-collection method (as opposed to a random sample).
3. The data collection method and the limitations of the use of the data to a "point in time" were clearly presented to all participants.
4. Confidentiality of individual respondents was assured through the use of a sealed envelope for each questionnaire.
5. Results of the study were promised to the participants.
6. The use of priority-mail (the most economical method of mailing the packets) was eye-catching and emphasized the timeliness of the data collection.

The expense of the "reward" was minimized as one of the researchers maintained a hobby as a "self-taught primitive painter" and used her skill to infuse the data collection with some "color." The timing of the mailing--the same day as the request for extensive data from the state evaluators--was unavoidable. This problem is one encountered by many researchers seeking to study restructuring schools--or

any innovative program. As the data were received and were found to be representative of the Venture Capital Schools, this problem in this study was eventually viewed as advantageous--the expense and time for follow-up phone calls was saved. One principal, whose school was among the 100% return-rate group, stated, "Your request was so much nicer than the request from the state evaluators." Four Venture Capital coordinators responded with notes of apology for being unable to collect the study data because of the state's evaluation. Only one Venture Capital coordinator responded by returning the total packet with a negative letter.

## References

- Comer, J. P. (1988). Educating poor minority children. Scientific American, 259 (5), 42-48.
- Dunham, R. B., Grube, J. A., Gardner, D. G., Cummings, L. L., & Pierce, J. L. (1989). The development of an attitude toward change instrument. Paper presented at the annual Academy of Management Conference.
- Elmore, R. (ed.) (1990). Restructuring schools: The next generation of educational reform. San Francisco: Jossey-Bass.
- Freeman, D., Loadman, W. E., and Kennedy, M. (1991). National Follow-up Survey of Teacher Education Graduates. Columbus, OH: National Database for Teacher Education Follow-up.
- Goodlad, J. I. (1990). Teachers for our nation's schools. San Francisco: Jossey-Bass.
- The Holmes Group. (1986). Tomorrow's teachers: A report of the Holmes Group. East Lansing, MI: The Holmes Group.
- The Holmes Group. (1990). Tomorrow's school: Principles for the design of professional development schools. East Lansing, MI: The Holmes Group.
- Huang, T. (1993). The relationships between elementary school principals' psychological types and openness to selected changes in organizational culture. Unpublished doctoral dissertation, The Ohio State University, Columbus, OH.
- Klecker, B. (1995). A study of teacher empowerment in Ohio's venture capital schools. Unpublished doctoral dissertation, The Ohio State University, Columbus, OH (pending).
- Levine, M. (1988). Professional practice schools: Building a model. Volume II. Washington, DC: American Federation of Teachers.
- Ohio Department of Education. (1994-95). Ohio educational directory. Columbus, OH: Ohio Department of Education.
- Ohio Department of Education. (July, 1993). Ohio's commitment to school renewal. Columbus, OH: Author.

Sarason, S. B. (1992). The predictable failure of educational reform: Can we change course before it's too late? San Francisco: Jossey-Bass.

Short, P. M., & Rinehart, J. S. (1992). School participant empowerment scale: Assessment of level of empowerment within the school environment. Educational and Psychological Measurement, 52, 951-961.

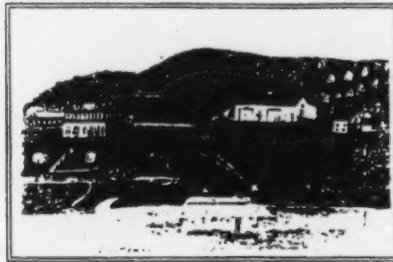
Sizer, T. R. (1992). Horace's school. Boston: Houghton Mifflin.

Timar, T. B., & Kirp, D. L. (1989). Educational reform in the 1980's: Lessons from the states. Phi Delta Kappan, 71, 504-51.

The Venture Capital Assessment Team. (October, 1994). Ohio's investment in educational futures: The first year. Plan City, OH: Synergetic Development, Inc.

APPENDIX A  
COVER LETTER

## PICTURE IT!\*\*



Dear Colleague:

Will you please help us take a picture of your school? We need you, the Venture Capital School contact person, to hold the camera! Our metaphorical camera is the enclosed questionnaires, designed to take a "snapshot-in-time" as your school begins restructuring.

This picture should include the building principal and each classroom teacher. Ideally, we would ask that a few minutes of your next staff meeting be set aside to take this "snapshot."

After each participant completes the questionnaire (approximate time-- 5 minutes) he or she should place the questionnaire in the white envelope provided, seal the envelope, and place his or her first name or initials on the front of the envelope and return the envelope to you. (This minimal identification is to enable you, as you collect the envelopes from the participants, to make note of missing teachers.)

We would ask you to help us by following-up on missing staff members. As you collect the envelopes from the principal and teachers please place them, sealed, in the large grey self-addressed return envelope.

When your picture is as complete as you feel possible-- we would like to see at least 80% of the teachers in the picture--and we must have the building principal--please return the "camera" to us in the enclosed large grey self-addressed postage paid envelope.

We will develop the envelope's contents through statistical analyses and will share the finished picture with your school's staff. Confidentiality of each participant will be maintained; all data will be analyzed and reported as aggregate data with no individual response identifiable.

Thank you for your help!

Sincerely,

A handwritten signature in cursive script, reading "William E. Loadman".

William E. Loadman, Principal Investigator  
The Ohio State University

A handwritten signature in cursive script, reading "Beverly Klecker".

Beverly Klecker, Research Assistant  
The Ohio State University

\*\*\*

To each school with responses from the building principal and 80% of the classroom teachers we will send a 8 x 10 signed limited edition (n=310) print of the original primitive painting of the early Ohio school pictured above.

For the school with the highest response rate the painter has agreed to do an original acrylic painting (16 x 20 framed) of your school for your teachers' lounge. (If there is a tie in the highest response rate--a drawing will be held).

## BEST COPY AVAILABLE